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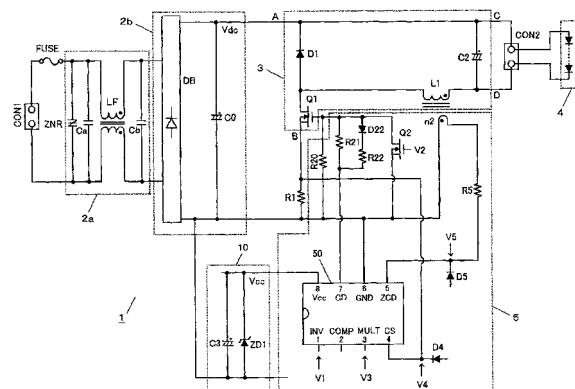
(54) **Lighting device of semiconductor light-emitting element and illumination fixture using the same**

(57) [Object] To light and dim a semiconductor light emitting element with high accuracy in a simple configuration.

[Means for Settlement] A lighting device of a semiconductor light emitting element including: a switching element connected in series to a direct-current power source and controlled to be turned on and off at a high-frequency wave; an inductance component which is connected in series to the switching element and to which an electric current flows from the direct-current power source at on-time of the switching element; a regeneration diode for emitting energy accumulated in the inductance component at the on-time of the switching element to the semiconductor light emitting element at off-time of the switching element; current detection means adapted to detect an electric current flowing to the switching element; and control means adapted to turn off the switching element when a current value detected by the current detection means reaches a predetermined value and to turn on the switching element when the emission of energy of the inductance component is completed, wherein the control means dims the semiconductor light emitting element by intermittently blocking at a low frequency an operation to detect the completion of the energy emission of the inductance component.

ance component at the on-time of the switching element to the semiconductor light emitting element at off-time of the switching element; current detection means adapted to detect an electric current flowing to the switching element; and control means adapted to turn off the switching element when a current value detected by the current detection means reaches a predetermined value and to turn on the switching element when the emission of energy of the inductance component is completed, wherein the control means dims the semiconductor light emitting element by intermittently blocking at a low frequency an operation to detect the completion of the energy emission of the inductance component.

Figure 1





PARTIAL EUROPEAN SEARCH REPORT

Application Number

EP 11 17 3309

under Rule 62a and/or 63 of the European Patent Convention.
 This report shall be considered, for the purposes of
 subsequent proceedings, as the European search report

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	WO 2010/045666 A1 (TRIDONICATCO GMBH & CO KG [AT]; TRIDONICATCO SCHWEIZ AG [CH]; MARENT G) 29 April 2010 (2010-04-29) * pages 6-21; figures 2A, 6 * -----	1-8, 16-21	INV. H05B33/08 H05B37/02
X	WO 2004/057921 A1 (KONINKL PHILIPS ELECTRONICS NV [NL]; PHILIPS CORP [US]) 8 July 2004 (2004-07-08) * pages 7-10; figures 7, 11 * -----	1-8, 16-21	
A	US 2007/013323 A1 (DE OTO LEONARD [US]) 18 January 2007 (2007-01-18) * pages 2, 3; figure 1 * -----	1-8, 16-21	
INCOMPLETE SEARCH			TECHNICAL FIELDS SEARCHED (IPC)
The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.			H05B
Claims searched completely : Claims searched incompletely : Claims not searched : Reason for the limitation of the search: see sheet C			
1	Place of search Munich	Date of completion of the search 31 October 2012	Examiner Morrish, Ian
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			



**INCOMPLETE SEARCH
SHEET C**

Application Number
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Claim(s) completely searchable:
1-8, 16-21

Claim(s) not searched:
9-15, 22-27

Reason for the limitation of the search:

Search restricted to claims 1-8 and 16-21 as indicated in the applicant's letter of reply dated 05.10.2011.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

31-10-2012

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